IN THE CLAIMS

Please amend the claims as follows:

Claims 1-20 (Canceled).

Claim 21 (New): A rotation member applied to and rotating in a housing, comprising:

an engaging portion rotatably supported by the housing; and

a coating covering the engaging portion and including one or more wear-resistant materials selected from the group consisting of Si, cubic BN, TiC, WC, SiC, Cr_3C_2, ZrO_2-Y and TiB, the coating being deposited from a tool electrode including the wear-resistant materials by processing the engaging portion as a workpiece with electric spark machining.

Claim 22 (New): The rotation member of claim 21, wherein the coating includes one or more solid lubricants selected from the group consisting of hexagonal BN, MoS_2, Cr_2O_3, WS_2 and $BaZrO_4$.

Claim 23 (New): The rotation member of claim 21, wherein the coating consists essentially of one or more wear-resistant materials selected from the group consisting of Si, cubic BN, TiC, WC, SiC, Cr_3C_2, ZrO_2-Y and TiB and one or more solid lubricants selected from the group consisting of hexagonal BN, MoS_2, Cr_2O_3, WS_2 and $BaZrO_4$.

Claim 24 (New): The rotation member of claim 2l,wherein the electric spark machining is carried out with rotating the rotation member.

Claim 25 (New): The rotation member of claim 21, wherein the engaging portion includes a groove configured to pool a lubrication liquid.

Claim 26 (New): A housing for rotatably supporting a rotation member, comprising:

a supporting portion configured to rotatably support the rotation member; and

a coating covering the bearing and including one or more wear-resistant materials selected from the group consisting of Si, cubic BN, TiC, WC, SiC, Cr_3C_2, ZrO_2-Y and TiB, the coating being deposited from a tool electrode including the wear-resistant material by processing the bearing as a workpiece with electric spark machining.

Claim 27 (New): The housing of claim 26, wherein the coating includes one or more solid lubricants selected from the group consisting of hexagonal BN, MoS_2, Cr_2O_3, WS_2 and $BaZrO_4$.

Claim 28 (New): The housing of claim 26, wherein the coating consists essentially of one or more wear-resistant materials selected from the group consisting of Si, cubic BN, TiC, WC, SiC, Cr_3C_2, ZrO_2-Y and TiB and one or more solid lubricants selected from the group consisting of hexagonal BN, MoS_2, Cr_2O_3, WS_2 and $BaZrO_4$.

Claim 29 (New): The housing of claim 26, wherein the bearing includes a groove configured to pool a lubrication liquid.

Claim 30 (New): A gear box comprising of the rotation member of claim 21.

Claim 31 (New): A gear box comprising the housing of claim 26.

Claim 32 (New): A shaft structure of variable vanes for regulating a fluid, comprising the rotation member of claim 21.

Claim 33 (New): A shaft structure of variable vanes for regulating a fluid, comprising the housing of claim 26.

Claim 34 (New): A method for a surface treatment of a shaft or a bearing, comprising:

setting a tool electrode including one or more materials selected from the group consisting of Ti, Si, cubic BN, TiC, WC, SiC, Cr_3C_2, $A1_2O_3$, ZrO_2-Y, TiN, TiB, hexagonal BN, MoS_2, Cr_2O_3, WS_2 and $BaZrO_4$;

setting the shaft or the bearing as a workpiece; and

forming a coating deposited from the tool electrode on the workpiece by electric spark machining.

Claim 35 (New): The method of claim 34, wherein the forming includes rotation of the workpiece.

Claim 36 (New): The method of claim 34,wherein the tool electrode includes one or more wear-resistant materials selected from the group consisting of Ti, Si, cubic BN, TiC, WC, SiC, Cr_3C_2, Al_2O_3, ZrO_2-Y, TiN and TiB and one or more solid lubricants selected from the group consisting of hexagonal BN, MoS_2, Cr_2O_3, WS_2 and $BaZrO_4$.

Claim 37 (New): The method of claim 34, further comprising:

molding the tool electrode from powder of including one or more wear-resistant materials selected from the group consisting of Ti, Si, cubic BN, TiC, WC, SiC, Cr_3C_2, $A1_2O_3$, ZrO_2-Y, TiN and TiB and one or more solid lubricants selected from the group consisting of hexagonal BN, MoS_2, Cr_2O_3, WS_2 and $BaZrO_4$ by compressing.

Claim 38 (New): The method of claim 34, wherein the forming is carried out in an electrically insulating liquid or an electrically insulating gas at an atmospheric pressure.

Claim 39 (New): A shaft processed with a surface treatment by the method of claim 34.

Claim 40 (New): A bearing processed with a surface treatment by the method of claim 34.

Claim 41 (New): A gear box comprising the shaft of claim 39.

Claim 42 (New): A gear box comprising the bearing of claim 40.

Claim 43 (New): A shaft structure of variable vanes for regulating a fluid, comprising of the shaft of claim 39.

Claim 44 (New): A shaft structure of variable vanes for regulating a fluid, comprising the bearing of claim 40.